

**REMARKS**

This application has been reviewed in light of the Office Action dated June 30, 2006. Claims 1 through 12 are pending in the application. Claims 1, 7, 9, and 10 have been amended in a manner that Applicants believe overcomes the rejections in the Office Action. Support for the amendments can be found throughout the specification of the present disclosure and recite aspects of the disclosure that Applicants are believed to be entitled. Applicants submit that no new matter or issues are introduced by the amendments or the new claims.

**Rejections Under 35 U.S.C. § 112**

The Examiner rejected Claims 9 through 12 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as the invention. Claims 9 and 10 have been amended to recite “tax-free account.” Claim 12 does not recite the phrase “tax –deferred account” as stated by examiner. Applicants respectfully submit that the rejection be withdrawn.

**Rejections Under 35 U.S.C. § 102(e)**

The Examiner rejected Claims 1, and 6 though 8 under 35 U.S.C. § 102(e) as being anticipated by Jones et al, U.S. Patent No. 6, 021, 397 (hereinafter Jones). Applicants submit that Claim 1 as amended overcomes this rejection. Claims 6 through 8 depend from Claim 1. Applicants respectfully request that the Examiner withdraw these rejections.

Claim 1, as amended, discloses “an account amount selection component that selects amounts to invest from said taxable and tax-free accounts randomly or using Genetic Algorithms (GA).” Jones does not disclose an account amount selection component that selects amounts to invest from said taxable and tax-free accounts randomly. ( see Office Action pg 7, paragraph 6). Likewise, Jones does not disclose an account selection component that selects amounts to invest from taxable and tax-free accounts using Genetic Algorithms (see Office Action pg 9, paragraph 7). Applicants respectfully request that this rejection be withdrawn.

**Rejections Under 35 U.S.C. § 103(a)**

**Jones in view of Kasscieh**

The Examiner rejected Claims 2, 3, and 9 as being unpatentable over Jones in view of Kasscieh (hereinafter Kass, “investment Decisions Using Genetic Algorithms” in the proceedings of the Thirtieth Hawaii International Conferences on System Sciences, Jan. 1997). Applicants respectfully traverse this rejection.

*Applicants’ claimed invention*

Claim 2 discloses an account amount selection component that randomly selects amounts from taxable and tax-free accounts, and the return on investment calculation component calculates an after-tax accumulation. Claim 3 further discloses that the steps of randomly selecting amount and calculating a return are performed a plurality of times to produce a maximal return.

Claim 9 discloses a method of determining an investment strategy for an entity that includes performing the sampling steps a plurality of times, the sampling steps comprising randomly selecting amounts from the tax-free accounts to invest in each of the plurality of investments; determining appropriate amounts from the taxable accounts so that the selected percentage amounts for each of plurality of investments is satisfied; and determining a result if the amounts were invested as selected and determined for the time horizon.

*The disclosure of Jones*

The Examiner states that Jones discloses the system wherein the account selection component select amounts from the taxable and tax-free accounts are performed plurality of times (Office Action, pg 6, paragraph 6). Applicants respectfully disagree. The Examiner cites Jones, Col. 10, lines 18-53 for an explanation of where Jones describes this feature of Applicants’ disclosure. Jones describes the tax adjustment modules that take into account tax implications.

*The deficiencies of Jones*

Jones does not disclose an amount selection component that randomly selects amounts from the taxable and tax-free accounts. Additionally, Jones does not describe performing the steps of randomly selecting amounts from the taxable and tax-free accounts a plurality of times to produce a maximal return.

Even if Kass could make up the deficiencies of Jones, there is no motivation to combine Jones and Kass. In order to properly reject the claims under 35 U.S.C. §103 as obvious in view of a combination of references, the Examiner must show a motivation to combine indicated in the references themselves or known to persons having ordinary skill in the art. Since no such suggestion can be found in the references themselves, and Applicants submit that persons having ordinary skill in the art would not be motivated to combine (or modify) the teachings of Jones and Kass without the use of impermissible hindsight, the combination of these references does not support an obviousness rejection under 35 U.S.C. 103(a).

The Examiner states that it would have been obvious to add the Kass enhancement to Jones since this would just be an extension of the financial examples given by Kass. (see Office Action, pg 7, paragraph 6). Applicants respectfully disagree. Jones discloses use of mean variance method for optimization. Kass on the other hand describes using Genetic Algorithms (GA) for use in investment decisions. Kass and Jones rely on different methods of calculation to optimize specific portfolios. Additionally, Kass was published before Jones. Therefore, there is not motivation to combine the teachings of Jones and Kass.

Accordingly, Applicants respectfully request the Examiner withdraw the rejections of Claims 2, 3, and 9 under 35 U.S.C. 103(a).

**Jones in view of Shoaf**

The Examiner rejected Claims 4, 5, and 10 through 12 as being unpatentable over Jones in view of Shoaf ("The Efficient Set GA for Stock Portfolios" in the IEEE World Conferences on Computational Intelligence held on May 4-9). Applicants respectfully traverse this rejection.

*Applicants' claimed invention*

Claim 4 discloses the system wherein the account amount selection component selects an amount from the taxable and tax-free accounts using Genetic Algorithms in order to produce a maximal return on investment for the entity at the time horizon.

Claim 5 discloses the system of claims 4 that further includes a chromosome structure, for use with the Genetic Algorithms, wherein the chromosome structure includes a plurality of values, each value being an indication of an amount from the tax-free accounts to invest in a selected one of the plurality of investments; and the return on investment calculation component calculates an after-tax accumulation for the entity based on the values in the chromosome structure.

Claim 10 discloses a method of determining an amount to invest that includes creating a plurality of GA chromosome structures, each GA chromosome structure including a value for each of the plurality of investments, each value being an indication of an amount from the tax-free accounts to invest in the corresponding investment; setting the values in the plurality of GA chromosome structures to initial settings; evaluating fitness of the plurality of GA chromosome structures; selecting at least one of the GA chromosome structures with an optimal fitness; and using the values from the selected GA chromosome structure as amounts from the tax-free accounts to invest in the corresponding investment for the substantially maximal accumulation. Claim 11 depends from Claim 10 and further includes calculating an improvement value of the substantially minimal after-tax accumulation based on the determined investment amounts from the taxable and tax-free accounts, as compared to an after-tax accumulation based on the initial setting.

Claim 12 discloses a computer system for determining an optimal investment strategy that includes means for obtaining information, a GA chromosome structure, means for obtaining initial amounts, means for calculating and after-tax accumulation, means for modifying the GA chromosome structure to improve the calculation after-tax accumulation; and mean for displaying the resulting after-tax accumulation.

*The disclosure of Jones*

The Examiner states that Jones discloses the system of Claim 1 wherein the account amount selection component selects an amount from the taxable and tax-free accounts (see Office Action, pg 9, paragraph 7). The Examiner also states that Jones further discloses a method of claim 10 further including the set of calculating an improvement value of the substantially maximal after-tax accumulation based on the determined investment amounts from the taxable and tax-free accounts, as compared to an after-tax accumulation base on the initial settings. (see Office Action, pg 10, paragraph 7).

The Examiner also states that Jones discloses a computer system for determining an optimal investment strategy comprising all of the limitations of Applicants' Claim 12 except that Jones does not explicitly disclose a GA structure, means for modifying the GA chromosome structure to improve the calculated after-tax accumulation.

*The deficiencies of Jones*

Jones does not disclose using Genetic Algorithms (GA) in order to produce a maximal return on investment for the entity at the time horizon. Jones does not disclose a chromosome structure, for use with the Genetic Algorithms, wherein the chromosome structure includes a plurality of values, each value being an indication of an amount from the tax-free accounts to invest in a selected one of the plurality of investments; and the return on investment calculation component calculates an after-tax accumulation for the entity based on the values in the chromosome structure.

Additionally, Jones does not disclose a system creating a plurality of GA chromosome structures, each GA chromosome structure including a value for each of the plurality of investments, each value being an indication of an amount from the tax-free accounts to invest in the corresponding investment; setting the values in the plurality of GA chromosome structures to initial settings; evaluating fitness of the plurality of GA chromosome structures; selecting at least one of the GA chromosome structures with an optimal fitness; and using the values from the selected GA chromosome structure as amounts from the tax-free accounts to invest in the

corresponding investment for the substantially maximal accumulation. Likewise, Jones does not disclose calculating an improvement value of the substantially minimal after-tax accumulation based on the determined investment amounts from the taxable and tax-free accounts, as compared to an after-tax accumulation based on the initial setting.

Even if Shoaf could make up the deficiencies of Jones, there is no motivation to combine Jones and Shoaf. In order to properly reject the claims under 35 U.S.C. §103 as obvious in view of a combination of references, the Examiner must show a motivation to combine indicated in the references themselves or known to persons having ordinary skill in the art. Since no such suggestion can be found in the references themselves, and Applicants submit that persons having ordinary skill in the art would not be motivated to combine (or modify) the teachings of Jones and Shoaf without the use of impermissible hindsight, the combination of these references does not support an obviousness rejection under 35 U.S.C. 103(a).

The Examiner relies on Shoaf for all the deficiencies of Jones that teach use of Genetic Algorithms. Jones discloses use of a mean variance method for optimization. Shoaf on the other hand describes using genetic algorithms for use in investment decisions. Shoaf and Jones rely on different methods of calculation to optimize specific portfolios. Therefore, there is not motivation to combine the teachings of Jones and Shoaf.

Accordingly, Applicants respectfully request the Examiner to withdraw the rejections of Claims 4, 5, and 10 through 12 under 35 U.S.C. 103(a).

**Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such action is hereby solicited. The Examiner is invited and encouraged to telephone the undersigned at the number below with any questions or concerns in furtherance of the prosecution of the present application.

Please charge any deficiency as well as any other fees which may become due at any time during the pendency of this application, or credit any overpayment of such fees to deposit account No. 50-0369. Also, in the event any extensions of time for responding are required for the pending application(s), please treat this paper as a petition to extend the time as required and charge deposit account No. 50-0369 therefor.

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Respectfully submitted,



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